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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,968	09/22/2003	Kumiko Takikawa	H-963-02	4980

24956 7590 05/19/2005

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

NGUYEN, DANNY

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EK

Office Action Summary**Application No.**

10/664,968

Applicant(s)

TAKIKAWA ET AL.

Examiner

Danny Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/3/2005 with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

2. *The corrected drawings filed 3/3/2005 are accepted.*

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-14, 21-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardenfors et al (USPN 6,477,148) in view of Brett (USPN 6,400,541), and Bando et al (USPN 6,700,792). Gardenfors discloses a communication semiconductor integrated circuit device (see fig. 5) comprises a transmission unit (e.g. 218, 219, 242) formed on a chip, and forming a transmission signal to be provided to an antenna (202); a reception unit (e.g. 216, 220, 222) formed on the chip, and receiving a receiving signal from the antenna and forming a signal which has a frequency lower than that of the receiving signal, wherein the reception unit includes a low noise amplifier (204) receiving the receiving signal; a terminal (such as the terminal which is coupled to the LNA 204) (see abstract, col. 1, lines 44-46). Gardenfors does not a protection circuit is

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coupled to the low noise amplifier as claimed. Brett discloses a protection device (e.g. figure 1) comprises a protection unit (20) is coupled to the low noise amplifier (10), the first voltage line (Vcc), and the second voltage line (Vee), wherein the protection circuit (see figures 2 and 3) includes a first protection circuit (50) and a second protection circuit (52) which are coupled between the first voltage line and the second voltage line. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the circuit of Gardenfors to incorporate the protection circuit which is coupled the low noise amplifier as disclosed by Brett in order to protect the input of LNA and the power supplies from ESD event (col. 3, lines 20-27). However, the combination of Gardenfors and Brett do not disclose the low noise amplifier is a LNA transistor as claimed. Bando discloses a communication system discloses a receiver unit comprises a LNA transistor for receiving the signal from the antenna (shown in fig. 1 and 9). It would have been of obvious to one of ordinary skill in the art at the time the invention was made to have modified to LNA of Gardenfors and Brett to incorporate the LNA transistor as disclosed by Bando in order to provide higher output impedance of LNA.

4. Claims 15, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardenfors et al in view of Brett, Bando, and Lu (USPN 4,989,057). The combinations of Gardenfors, Brett, and Bando disclose all limitation of claim 1 as discussed above, but do not disclose protection circuits as claimed. Lu discloses an ESD protection (figure 3) comprises a plurality of protection circuits (such as 54, 56, 62, 64), which are coupled between the first power line and the second power lines are

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MOSFET transistors. It would have been of obvious to one of ordinary skill in the art at the time the invention was made to have modified to protection circuit of Gardenfors, Brett, and Bando to incorporate the plural protection circuits which are connected the power lines as disclosed by Lu in order to provide circuits from both positive and negative ESD events (col. 2, lines 7-17).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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5/15/2005



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2836